



# Geometry

Concepts and Applications

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STANDARDS	PAGE REFERENCES
M11.A Numbers and Operations	
ASSESSMENT ANCHOR	
M11.A.1 Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems.	
M11.A.1.1 Represent and/or use numbers in equivalent forms (e.g., integers, fractions, decimals, percents, square roots, exponents and scientific notation). <i>Reference: 2.1.8.A, 2.1.8.B, 2.1.11.A</i>	
M11.A.1.1.1 Find the square root of an integer to the nearest tenth using either a calculator or estimation.	<p><b>Student Edition:</b> 87, 139, 225, 257-262, 262-267, 270, 271, 696 <i>Check for Understanding</i> 259 #4-#13, 260 #14-#15, 265 #1-#11 <i>Hands-On Geometry</i> 262 <i>Preparing for Standardized Test</i> 87 #1, 139 #5, 225 #2 <i>Real World Example</i> 258, 264 <i>Study Guide and Assessment</i> 270 #27-#30, #31-#34, #36 <i>Test</i> 271 #17-#19 <i>Theorem 6-10</i> 258 <i>Theorem 6-11</i> 263</p> <p><b>Teacher's Edition:</b> A 261, 267; F 262; ICE 257, 258, 263, 264; TT 257, 258, 263, 264</p>

<p><b>M11.A.1.1.2</b> Express numbers and/or simplify expressions using scientific notation (including numbers less than 1).</p>	<p><b>Student Edition:</b> 46, 214 #28, 347 #3, 583 #2 <i>Preparing for Standardized Tests</i> 46 example 1</p>
<p><b>M11.A.1.1.3</b> Simplify square roots. (e.g., <math>\sqrt{24} = 2\sqrt{6}</math>)</p>	<p><b>Student Edition:</b> 548-553, 554-558, 559-563, 578-579, 581, 673 <i>Check for Understanding</i> 552 #1-#15, 556 #3, 557 #4-#5, 562 #1-#6 <i>Hands-On Geometry</i> 554, 559 <i>Preparing for Standardized Tests</i> 673 #2 <i>Reading Geometry</i> 550 <i>Real World Example</i> 551, 555, 561 <i>Study Guide and Assessment</i> 578 #11-#16, 579 #17-#20, 579 #21-#24 <i>Technology Tip</i> 549 <i>Test</i> 581 #3-#6, #7-#12 <i>Theorem 13-1</i> 555 <i>Theorem 13-2</i> 560 <i>Quiz</i> 558 #1-#5 <b>Teacher's Edition:</b> A 553, 558, 563; F 554, 559, 564; ICE 549-551, 555-556, 560, 561; P 556; RA 562; TT 549, 554, 555, 561, 562</p>
	<p><b>M11.A.1.2</b> Apply number theory concepts to show relationships between real numbers in problem-solving settings. <b>Reference: 2.1.8.E</b></p>
	<p><b>M11.A.1.2.1</b> Find the Greatest Common Factor (GCF) and/or the Least Common Multiple (LCM) for sets of monomials.</p>

STANDARDS	PAGE REFERENCES
<p><b>M11.A.1.3</b> Estimate the value of an irrational number.  <i>Reference: 2.2.8.C</i></p>	
<p><b>M11.A.1.3.1</b>            Locate/identify irrational numbers at the approximate location on a number line.</p>	<p><b>Student Edition:</b>            50-55, 67 #26, 85, 127 #27, 479, 548  <i>Check for Understanding</i> 54 #4-#10  <i>Postulate 2-1</i> 53  <i>Postulate 2-2,2-3</i> 54  <i>Reading Geometry</i> 479  <i>Real World Example</i> 53  <i>Test 85</i> #2  <b>Teacher's Edition:</b>            A 55; F 56; ICE 51, 52, 53; RA 52; TT 51, 52</p>
<p><b>M11.A.1.3.2</b>            Compare and/or order any real numbers (rational and irrational may be mixed).</p>	<p><b>Student Edition:</b>            50-55  <i>Check for Understanding</i> 53 #1-#3, 54 #4-#10  <i>Postulate 2-1</i> 53  <i>Postulate 2-2, 2-3</i> 54  <i>Real World Example</i> 53  <b>Teacher's Edition:</b>            A 55; F56; ICE 51, 52, 53; RA 52; TT 51, 52</p>

STANDARDS		PAGE REFERENCES
<b>ASSESSMENT ANCHOR</b>		
<b>M11.A.2</b>	<b>Understand the meanings of operations, use operations and understand how they relate to each other.</b>	
<b>M11.A.2.1</b>	<b>Apply ratio and/or proportion in problem-solving situations.</b> <i>Reference: 2.2.11.A, 2.8.11.P</i>	
<b>M11.A.2.1.1</b> Solve problems using operations with rational numbers including rates and percents (single and multi-step and multiple procedure operations) (e.g., distance, work and mixture problems, etc.).		<b>Student Edition:</b> 87, 89, 184, 185, 225, 239 #28, 49, 262-267, 270, 618-622, 723, 724 <i>Algebra Review</i> 723 #1-#24, 724 #1-#23 <i>Check for Understanding</i> 265 #1-#11, 620 #5-#8 <i>Check Your Readiness</i> 49 #1-#30, 89 #5-#20 <i>Hands-On Geometry</i> 262 <i>Preparing for Standardized Tests</i> 87 #4, #8, 185 #3, #5, 225 #5 <i>Study Guide and Assessment</i> 270 #31-#34 <i>Test</i> 271 #19 <i>Theorem 6-11</i> 263 <i>Theorem 14-16</i> 618 <i>Real World Example</i> 264, 619 <b>Teacher's Edition:</b> A 267, 622; HG 263; ICE 263, 264, 619; RA 265, 620; TT 263, 264, 619
<b>M11.A.2.1.2</b> Solve problems using direct and inverse proportions.		<b>Student Edition:</b> 350-355, 407 #43 <i>Check for Understanding</i> 352 #1-#3, 353 #4-#16 <i>Real World Problem</i> 352 <i>Theorem 9-1</i> 351 <b>Teacher's Edition:</b> A 355; F 356; ICE 351, 352; IS 351; RA 352; TT 351, 352

STANDARDS	PAGE REFERENCES
<p><b>M11.A.2.1.3</b> Identify and/or use proportional relationships in problem-solving settings.</p>	<p><b>Student Edition:</b> 356-361, 368-373, 382-387, 397 <i>Check for Understanding</i> 359 #1-#8, 372 #1-#8, 384 #1-#2, 385 #3-#8 <i>Graphing Calculator Exploration</i> 371 <i>Hands-On Geometry</i> 370, 382 <i>Reading Geometry</i> 356 <i>Real World Example</i> 358 <i>Study Guide and Assessment</i> 395 #18-#19, #20-#21, #22-#23, #24-#27, 396 #28-#29, #30-#31 <i>Test</i> 397#3-#5, #7, #11, #12-#13, #17, #20 <i>Theorem 9-4</i> 368 <i>Theorem 9-5</i> 370 <i>Theorem 9-8</i> 383 <i>Theorem 9-9</i> 384 <i>Quiz</i> 361 #4-#5, 387 #1-#5</p> <p><b>Teacher's Edition:</b> A 361, 373, 386; F 362, 374, 388; GCE 371; HG 370, 383; ICE 357, 358, 369, 370, 371, 383; RA 360, 372, 384; TT 356, 357, 368, 369, 383</p>
<p><b>M11.A.2.2</b> Use exponents, roots and/or absolute value to solve problems. <i>Reference: 2.1.11.A</i></p>	
<p><b>M11.A.2.2.1</b> Simplify/evaluate expressions involving positive and negative exponents, roots and/or absolute value (may contain all types of real numbers - exponents should not exceed power of 10).</p>	<p><b>Student Edition:</b> 52-55, 82, 85, 139, 256-261, 262-267 <i>Check for Understanding</i> 53 #2, 54 #7-#9, 259 #1-#3, #4-#9, #10-#13, 265 #3, #7-#9, #10-#11 <i>Hands-On Geometry</i> 262 <i>Preparing for Standardized Tests</i> 139 #6 <i>Real World Example</i> 258, 264 <i>Study Guide and Assessment</i> 82 #11-#13 <i>Test</i> 85 #5, #6-#8 <i>Theorem 6-9</i> 256 <i>Theorem 6-10</i> 258 <i>Theorem 6-11</i> 263 <i>Quiz</i> 267 #3-#5</p> <p><b>Teacher's Edition:</b> A 261, 267; F 262; HG 263; ICE 53, 257, 258, 263, 264; TT 52, 257, 258, 263, 264</p>

STANDARDS	PAGE REFERENCES
<p><b>M11.A.2.2.2</b> Simplify/evaluate expressions involving multiplying with exponents (e.g., <math>x^6 * x^7 = x^{13}</math>), powers of powers (e.g., <math>(x^6)^7 = x^{42}</math>) and powers of products <math>(2x^2)^3 = 8x^6</math> (positive exponents only).</p>	<p><b>Student Edition:</b> 616 #9, #10</p>
<p><b>ASSESSMENT ANCHOR</b></p>	
<p><b>M11.A.3</b> Compute accurately and fluently and make reasonable estimates.</p>	
<p><b>M11.A.3.1</b> Apply the order of operations in computation and in problem-solving situations. <i>Reference: 2.2.8.A</i></p>	
<p><b>M11.A.3.1.1</b> Simplify/evaluate expressions using the order of operations to solve problems (any rational numbers may be used).</p>	<p><b>Student Edition:</b> <i>Algebra Review 723 #1-#24</i></p>
<p><b>M11.A.3.2</b> Use estimation strategies in problem-solving situations. <i>Reference: 2.2.11.B, 2.2.11.D</i></p>	
<p><b>M11.A.3.2.1</b> Use estimation to solve problems.</p>	<p><b>Student Edition:</b> 413-418, 417 #18-#20, #23, #24 <i>Check for Understanding 416 #7</i> <i>Real World Example 414</i> <b>Teacher’s Edition:</b> A 418; F 419; ICE 414; TT 415</p>
<p><b>M11.B Measurement</b></p>	
<p><b>ASSESSMENT ANCHOR</b></p>	
<p><b>M11.B.1</b> Demonstrate an understanding of measurable attributes of objects and figures, and the units, systems and processes of measurement. Not assessed at grade 11.</p>	
<p><b>ASSESSMENT ANCHOR</b></p>	
<p><b>M11.B.2</b> Apply appropriate techniques, tools and formulas to determine measurements.</p>	
<p><b>M11.B.2.1</b> Use and/or compare measurements of angles. <i>Reference: 2.3.11.A, 2.3.11.B</i></p>	
<p><b>M11.B.2.1.1</b> Measure and/or compare angles in degrees (up to <math>360^\circ</math>) (protractor must be provided or drawn).</p>	<p><b>Student Edition:</b> 67 #20, #22, 96-101, 109 #26 <i>Check for Understanding 100 #1-#3, #4-#8, #8-#9</i> <i>Investigation 380-381</i> <i>Hands-On Geometry 65, 99</i> <b>Teacher’s Edition:</b> A 381; F 104; HG 65, 99; ICE 97,98; TT 97, 381</p>

STANDARDS	PAGE REFERENCES
<p><b>M11.B.2.2</b> Use and/or develop procedures to determine or describe measures of perimeter, circumference, area, surface area and/or volume. (May require conversions within the same system.)</p> <p><i>Reference: 2.3.8.A, 2.3.8.D</i></p>	
<p><b>M11.B.2.2.1</b></p> <p>Calculate the surface area of prisms, cylinders, cones, pyramids and/or spheres. Formulas are provided on the reference sheet.</p>	<p><b>Student Edition:</b></p> <p>504-509, 516-521, 529, 541, 542, 543</p> <p><i>Check for Understanding</i> 508 #1-#6, 520 #1-#6, 531 #4-#6</p> <p><i>Graphing Calculator</i> 506</p> <p><i>Real World Example</i> 508, 518</p> <p><i>Study Guide and Assessment</i> 541 #15-#16, #20-#21, 542 #24-#25</p> <p><i>Test</i> 543 #7-#12</p> <p><i>Theorem</i> 12-1, 12-2 504</p> <p><i>Theorem</i> 12-3, 12-4 507</p> <p><i>Theorem</i> 12-7, 12-8 517</p> <p><i>Theorem</i> 12-9, 12-10 519</p> <p><i>Theorem</i> 12-13 529</p> <p><b>Teacher's Edition:</b></p> <p>A 509, 521; F 510, 522; GCE 506; ICE 505, 506, 507, 508, 517, 518, 519, 529; TT 505, 506, 517, 518, 519</p>
<p><b>M11.B.2.2.2</b></p> <p>Calculate the volume of prisms, cylinders, cones, pyramids and/or spheres. Formulas are provided on the reference sheet.</p>	<p><b>Student Edition:</b></p> <p>510-515, 522-527, 541, 543</p> <p><i>Check for Understanding</i> 513 #4-#6, #7-#10, 525 #2-#7, 531 #4-#5</p> <p><i>Hands-On Geometry</i> 510, 522</p> <p><i>Real World Example</i> 512, 524, 530</p> <p><i>Study Guide and Assessment</i> 541 #17-#19, #22-#23, #24-#25</p> <p><i>Test</i> 543 #13-#18</p> <p><i>Theorem</i> 12-5 511</p> <p><i>Theorem</i> 12-6 512</p> <p><i>Theorem</i> 12-11, 12-12 523</p> <p><i>Theorem</i> 12-14 529</p> <p><i>Quiz</i> 515 #9-#10, 527 #6-#10</p> <p><b>Teacher's Edition:</b></p> <p>A 515, 517; F 516, 528, 534; HG 511, 523; ICE 511, 512, 523, 524, 530; IS 524; RA 525; TT 511, 523</p>

STANDARDS	PAGE REFERENCES
<p><b>M11.B.2.2.3</b> Estimate area, perimeter or circumference of an irregular figure.</p>	<p><b>Student Edition:</b> 413-418 <i>Check for Understanding</i> 416 #1-#8 <i>Hands-On Geometry</i> 415 <i>Postulate 10-3</i> 413 <i>Real World Example</i> 414 <i>Study Guide and Assessment</i> 447 #19-#20 <i>Test</i> 449 #6, #7</p> <p><b>Teacher's Edition:</b> A 418; F 419; HG 415; ICE 414; TT 413, 414, 415</p>
<p><b>M11.B.2.2.4</b> Find the measurement of a missing length given the perimeter, circumference, area or volume.</p>	<p><b>Student Edition:</b> 478-482, 423 #21, 429 #14 <i>Check for Understanding</i> 481 #3-#8 <i>Graphing Calculator Exploration</i> 478 <i>Real World Example</i> 480, 484 <i>Theorem 11-7</i> 479</p> <p><b>Teacher's Edition:</b> F 483; GCE 479; ICE 479, 480; RA 480; TT 480</p>
<p><b>M11.B.2.3</b> Describe how a change in one dimension of a figure (2 or 3 dimensional) affects other measurements of that figure. <i>Reference: 2.3.8.E</i></p>	
<p><b>M11.B.2.3.1</b> Describe how a change in the linear dimension of a figure affects its perimeter, circumference, area or volume.</p> <ul style="list-style-type: none"> <li>• How does changing the length of the radius of a circle affect the circumference of the circle?</li> <li>• How does changing the length of the edge of a cube affect the volume of the cube?</li> <li>• How does changing the length of the base of a triangle affect the area of the triangle?</li> </ul>	<p><b>Student Edition:</b> 707 #26</p>

STANDARDS		PAGE REFERENCES
M11.C Geometry		
<b>ASSESSMENT ANCHOR</b>		
M11.C.1 Analyze characteristics and properties of two- and three-dimensional geometric shapes and demonstrate understanding of geometric relationships.		
M11.C.1.1 Identify and/or use parts of circles and segments associated with circles. <i>Reference: 2.9.11.F</i>		
M11.C.1.1.1 Identify and/or use the properties of a radius, diameter and/or tangent of a circle (given numbers should be whole).	<b>Student Edition:</b> 454-458, 592-597 <i>Check for Understanding</i> 456 #1-#3, #4-#6, 457 #7-#9, #10-#12, 595 #1-#2, #6-#7, #8 <i>Hands-On Geometry</i> 493 <i>Study Guide and Assessment</i> 488 #12-#14 <i>Theorem</i> 11-1 455 <i>Theorem</i> 11-2 456 <i>Theorem</i> 14-4, 14-5 592 <b>Teacher's Edition:</b> A 458, 597; F 462, 600; HG 593; ICE 455, 456, 593, 594; RA 456, 594; TT 454, 456	
M11.C.1.1.2 Identify and/or use the properties of arcs, semicircles, inscribed angles and/or central angles.	<b>Student Edition:</b> 462-467, 468-473 <i>Check for Understanding</i> 465 #1-#3, #4-#6, 466 #7-#12, 471 #3-#4, #5-#6, 472 #7-#8 <i>Hands-On Geometry</i> 469 <i>Postulate</i> 11-1 463 <i>Theorem</i> 11-3 464 <i>Theorem</i> 11-4 468 <i>Theorem</i> 11-5 469 <i>Quiz</i> 467 #4-#9, #10 <b>Teacher's Edition:</b> A 467, 473; F 468, 474; HG 469; ICE 463, 464, 468, 471; RA 465, 471; TT 462, 463, 468-470	

STANDARDS	PAGE REFERENCES
<p><b>M11.C.1.2</b> Recognize and/or apply properties of angles, triangles and quadrilaterals.  <b>Reference: 2.9.8.D, 2.9.11.C</b></p>	
<p><b>M11.C.1.2.1</b>  Identify and/or use properties of triangles (e.g., medians, altitudes, angle bisectors, side/angle relationships, Triangle Inequality Theorem).</p>	<p><b>Student Edition:</b>  228-233, 234-239, 240-243, 246-250  <i>Check for Understanding</i> 231 #1-#7, 237 #1-#7, 242 #1-#6, 249 #1-#5  <i>Graphing Calculator Exploration</i> 246  <i>Hands-On Geometry</i> 228, 234  <i>Theorem 6-1</i> 230  <i>Theorem 6-2, 6-3</i> 247  <i>Theorem 6-4</i> 248  <i>Theorem 6-5</i> 249  <i>Quiz</i> 243</p> <p><b>Teacher's Edition:</b>  GCE 247; HG 229, 235; ICE 229, 230, 235, 236, 241, 247, 248; ML 228, 234, 240, 246; TT 229, 230, 234, 235, 236, 240, 247</p>
<p><b>M11.C.1.2.2</b>  Identify and/or use properties of quadrilaterals (e.g., parallel sides, diagonals, bisectors, congruent sides/angles and supplementary angles).</p>	<p><b>Student Edition:</b>  316-321, 322-326, 327-331, 333-338  <i>Chapter 8 Investigation</i> 340-341  <i>Check for Understanding</i> 319 #1-#9, 324 #1-#2, 325 #3-#6, 330 #1-#15, 336 #1-#7  <i>Graphing Calculator Exploration</i> 316  <i>Hands-On Geometry</i> 322, 328  <i>Math In The Workplace</i> 339  <i>Real World Example</i> 328, 333  <i>Test</i> 345  <i>Theorem 8-2, 8-3, 8-4</i> 317  <i>Theorem 8-5</i> 318  <i>Theorem 8-6</i> 319  <i>Theorem 8-7</i> 323  <i>Theorem 8-8, 8-9</i> 324  <i>Theorem 8-10, 8-11, 8-12</i> 329  <i>Theorem 8-13, 8-14</i> 334  <i>Quiz</i> 332 #1-#5</p> <p><b>Teacher's Edition:</b>  A 321, 326, 338, 341; F 322, 327, 333; GCE 317; HG 323, 328; ICE 318, 323, 324, 328, 329, 333, 334, 335; ML 317, 327, 340; TT 317, 322, 323, 327, 333, 335, 341</p>

STANDARDS	PAGE REFERENCES
<p><b>M11.C.1.2.3</b> Identify and/or use properties of isosceles and equilateral triangles.</p>	<p><b>Student Edition:</b> 188-192 <i>Check for Understanding</i> 190 #2, #3, #5, #6, #7 <i>Info Graphic</i> 189 <b>Teacher's Edition:</b> A 192; F 193; ICE 189, 190; TT 189</p>
<p><b>M11.C.1.3</b> Use properties of congruence, correspondence and similarity in problem-solving settings involving two- and three-dimensional figures. <b>Reference: 2.9.11.B</b></p>	
<p><b>M11.C.1.3.1</b> Identify and/or use properties of congruent and similar polygons or solids.</p>	<p><b>Student Edition:</b> 203, 207, 356-361, 363-367, 439 #33 <i>Check for Understanding</i> 205 #1, #3-#6, #7, #8-#9, 359 #1-#8, 365 #1-#4, 366 #5 <i>Hands-On Geometry</i> 203, 362 <i>Postulate 9-1</i> 363 <i>Real World Example</i> 358, 365 <i>Theorem 9-2, 9-3</i> 363 <b>Teacher's Edition:</b> A 207, 361, 367; F 210, 362, 368; HG 204, 363; ICE 204, 205, 357, 358, 364, 365; ML 362; TT 204, 356, 357, 363, 364</p>
<p><b>M11.C.1.4</b> Solve problems involving right triangles using the Pythagorean Theorem. <b>Reference: 2.10.11.B</b></p>	
<p><b>M11.C.1.4.1</b> Find the measure of a side of a right triangle using the Pythagorean Theorem (Pythagorean Theorem included on the reference sheet).</p>	<p><b>Student Edition:</b> 256-261 <i>Check for Understanding</i> 259 #1-#13 <i>Theorem 6-9</i> 256 <b>Teacher's Edition:</b> ICE 257, 258; ML 256; TT 257, 258</p>
<p><b>ASSESSMENT ANCHOR</b> <b>M11.C.2</b> Identify and/or apply concepts of transformations or symmetry. <b>Not assessed at grade 11.</b></p>	

STANDARDS		PAGE REFERENCES
<b>ASSESSMENT ANCHOR</b>		
<b>M11.C.3</b> Locate points or describe relationships using the coordinate plane.		
<b>M11.C.3.1</b> Solve problems using analytic geometry. <i>Reference: 2.9.11.G</i>		
<b>M11.C.3.1.1</b> Calculate the distance and/or midpoint between 2 points on a number line or on a coordinate plane (formula provided on the reference sheet).	<b>Student Edition:</b> 55 #32-#34, 77-81, 94 #27, 262-267 <i>Check for Understanding</i> 79 #1-#3, 80 #4-#13, 265 #1-#11 <i>Graphing Calculator Exploration</i> 79 <i>Hands-On Geometry</i> 77, 262 <i>Real World Example</i> 264 <i>Theorem</i> 2-5, 2-6 77 <i>Theorem</i> 6-11 263 <b>Teacher's Edition:</b> A 81; HG 77, 263; ICE 78, 263, 264; TT 77, 263, 264	
<b>M11.C.3.1.2</b> Relate slope to perpendicularity and/or parallelism (limit to linear algebraic expressions; slope formula provided on the reference sheet).	<b>Student Edition:</b> 174-177 <i>Check for Understanding</i> 177 #1-#3, #2-#5, #6-#7, #8-#9, #10-#12 <i>Study Guide and Assessment</i> 182 #34-#36, #39-#41 <i>Test</i> 183 #21-#22 <b>Teacher's Edition:</b> A 179; ICE 176; IS 175; TT 175, 176	

STANDARDS	PAGE REFERENCES
<b>M11.D Algebraic Concepts</b>	
<b>ASSESSMENT ANCHOR</b>	
<b>M11.D.1 Demonstrate an understanding of patterns, relations and functions.</b>	
<b>M11.D.1.1</b> Analyze and/or use patterns or relations. <i>Reference: 2.8.11.Q, 2.8.11.A, 2.8.11.O</i>	
<b>M11.D.1.1.1</b> Analyze a set of data for the existence of a pattern and represent the pattern algebraically and/or graphically.	<b>Student Edition:</b> 4-9 <i>Chapter 1 Investigation</i> 10-11 <i>Check for Understanding</i> 7 #3, #4-#7, #8-#11 <i>Hands-On Geometry</i> 6 <i>Real World Link</i> 7 <b>Teacher’s Edition:</b> A 9, 11; F 12; HG 6; ICE 4, 5, 6, 7; ML 10; RA 7; TT 6, 7, 11
<b>M11.D.1.1.2</b> Determine if a relation is a function given a set of points or a graph.	<b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 492-493
<b>M11.D.1.1.3</b> Identify the domain, range or inverse of a relation (may be presented as ordered pairs or a table).	<b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 493 #10 Part A

STANDARDS	PAGE REFERENCES
<b>ASSESSMENT ANCHOR</b>	
<b>M11.D.2</b> Represent and/or analyze mathematical situations using numbers, symbols, words, tables and/or graphs.	
<b>M11.D.2.1</b> Write, solve and/or graph linear equations and inequalities using various methods. <i>Reference: 2.8.8.F, 2.8.11.D, 2.8.11.H, 2.8.11.J, 2.8.11.N, 2.8.11.L, 2.8.11.K</i>	
<p><b>M11.D.2.1.1</b> Solve compound inequalities and/or graph their solution sets on a number line (may include absolute value inequalities).</p>	<p><b>Student Edition:</b> 290-295, 296-300, 430 #23 <i>Check for Understanding</i> 293 #4-#8, 298 #1-#3, 299 #4-#5, #6-#8 <i>Graphing Calculator Exploration</i> 290 <i>History Link</i> 298 <i>Real World Example</i> 292 <i>Study Guide and Assessment</i> 304 #31-#33, #34-#36 <i>Test</i> 305 #16, #17, #25 <i>Theorem 7-6, 7-7</i> 291 <i>Theorem 7-8</i> 292 <i>Theorem 7-9</i> 297 <i>Quiz</i> 295 #1-#2 <b>Teacher's Edition:</b> A 295, 300; F 296; GCE 291; ICE 291, 292, 297, 298; RA 298; TT 291, 293, 297, 298, 299</p>
<p><b>M11.D.2.1.2</b> Identify or graph functions, linear equations or linear inequalities on a coordinate plane.</p>	<p><b>Student Edition:</b> 174-177 <i>Check for Understanding</i> 177 #1-#3, #2-#5, #6-#7, #8-#9, #10-#12 <i>Study Guide and Assessment</i> 182 #34-#36, #39-#41 <i>Test</i> 183 #21-#22 <b>Teacher's Edition:</b> A 179; ICE 176; IS 175; TT 175, 176</p>

STANDARDS	PAGE REFERENCES
<p><b>M11.D.2.1.3</b> Write, solve and/or apply a linear equation (including problem situations).</p>	<p><b>Student Edition:</b> 174-177 <i>Check for Understanding</i> 177 #1-#3, #2-#5, #6-#7, #8-#9, #10-#12 <i>Study Guide and Assessment</i> 182 #34-#36, #39-#41 <i>Test</i> 183 #21-#22 <b>Teacher's Edition:</b> A 179; ICE 176; IS 175; TT 175, 176</p>
<p><b>M11.D.2.1.4</b> Write and/or solve systems of equations using graphing, substitution and/or elimination (limit systems to 2 equations).</p>	<p><b>Student Edition:</b> 676-680, 681-686 <i>Check for Understanding</i> 678 #1-#3, 679 #4-#6, #7-#9, #10, 684 #1-#3, #4-#6, #7-#8, #9-#10 <i>Real World Example</i> 677, 683 <i>Technology Tip</i> 678 <b>Teacher's Edition:</b> A 680, 686; F 681, 687; ICE 677, 682, 683; RA 678, 684; TT 677, 681, 682</p>
<p><b>M11.D.2.1.5</b> Solve quadratic equations using factoring (integers only – not including completing the square or the Quadratic Formula).</p>	<p><b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 771 #9, 775 #8</p>
<p><b>M11.D.2.2</b> Simplify expressions involving polynomials. <i>Reference: 2.8.11.S</i></p>	
<p><b>M11.D.2.2.1</b> Add, subtract and/or multiply polynomial expressions (express answers in simplest form – nothing larger than a binomial multiplied by a trinomial).</p>	<p><b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 715 #6</p>
<p><b>M11.D.2.2.2</b> Factor algebraic expressions, including difference of squares and trinomials (trinomials limited to the form <math>ax^2+bx+c</math> where <math>a</math> is not equal to 0).</p>	<p><b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 771 #9, 775 #8</p>
<p><b>M11.D.2.2.3</b> Simplify algebraic fractions.</p>	<p><b>Student Edition:</b> <i>Algebra Review</i> 721 #1-#18</p>

STANDARDS	PAGE REFERENCES
<b>ASSESSMENT ANCHOR</b>	
<b>M11.D.3 Analyze change in various contexts.</b>	
<b>M11.D.3.1 Describe and/or determine change.</b> <i>Reference: 2.8.8.J, 2.11.8.B</i>	
<b>M11.D.3.1.1</b> Identify, describe and/or use constant or varying rates of change.	<b>Student Edition:</b> <i>Mixed Problem Solving</i> 759 #10, 772 #18
<b>M11.D.3.1.2</b> Determine how a change in one variable relates to a change in a second variable (e.g., $y=4/x$ , if $x$ doubles, what happens to $y$ ?).	<b>Student Edition:</b> 388-393 <i>Check for Understanding</i> 391 #7-#8 <i>Hands-On Geometry</i> 388 <i>Real World Example</i> 389 <i>Test</i> 396 #30, #31 <i>Theorem</i> 9-10 388 <b>Teacher's Edition:</b> A 393; HG 389; ICE 389, 390; RA 391; TT 389, 390
<b>M11.D.3.2 Compute and/or use the slope of a line.</b> <i>Reference: 2.8.11.J, 2.8.11.L</i>	
<b>M11.D.3.2.1</b> Apply the formula for the slope of a line to solve problems (formula given on reference sheet).	<b>Student Edition:</b> 168-173 <i>Check for Understanding</i> 171 #1-#3, #4-#6, 172 #7-#9 <i>Graphing Calculator Exploration</i> 170 <i>Hands-On Geometry</i> 169 <i>Postulate</i> 4-3, 4-4 172 <i>Real World Example</i> 171 <b>Teacher's Edition:</b> A 173; F 174; GCE 170; HG 169; ICE 169, 171; RA 171; TT 169, 170
<b>M11.D.3.2.2</b> Given the graph of the line, 2 points on the line, or the slope and a point on a line, write or identify the linear equation in point-slope, standard and/or slope-intercept form.	<b>Student Edition:</b> 174-179 <i>Check for Understanding</i> #10, #11, #12 <b>Teacher's Edition:</b> A 179; ICE 175, 176; RA 177; TT 175, 176

STANDARDS	PAGE REFERENCES
<p><b>M11.D.3.2.3</b> Compute the slope and/or y-intercept represented by a linear equation or graph.</p>	<p><b>Student Edition:</b> 168-173 <i>Check for Understanding</i> 171 #4-#6 <i>Hands-On Geometry</i> 169 <i>Postulate</i> 4-3, 4-4 172 <b>Teacher’s Edition:</b> A 173; F 174; HG 169; ICE 169; RA 171; TT 169, 170</p>
<p><b>ASSESSMENT ANCHOR</b></p>	
<p><b>M11.D.4 Describe or use models to represent quantitative relationships.</b></p>	
<p><b>M11.D.4.1</b> Interpret and/or use linear, quadratic and/or exponential functions and their equations, graphs or tables. <i>Reference: 2.8.11.K, 2.8.11.Q</i></p>	
<p><b>M11.D.4.1.1</b> Match the graph of a given function to its table or equation.</p>	<p><b>Student Edition:</b> 178 #31-#34 <i>Preparing for Standardized Tests</i> 493 #3, 545 #2</p>
<p><b>M11.E Data Analysis and Probability</b></p>	
<p><b>ASSESSMENT ANCHOR</b></p>	
<p><b>M11.E.1 Formulate or answer questions that can be addressed with data and/or organize, display, interpret or analyze data.</b></p>	
<p><b>M11.E.1.1</b> Appropriately display and/or use data in problem-solving settings. <i>Reference: 2.6.11.A, 2.6.8.E</i></p>	
<p><b>M11.E.1.1.1</b> Create and/or use appropriate graphical representations of data, including box-and-whisker plots, stem-and-leaf plots or scatter plots.</p>	<p><b>Student Edition:</b> 185, 339 <i>Math in the Workplace</i> 339 <i>Preparing for Standardized Tests</i> 185 #7 <b>Teacher’s Edition:</b> TT 339</p>
<p><b>M11.E.1.1.2</b> Analyze data and/or answer questions based on displayed data (box-and-whisker plots, stem-and-leaf plots or scatter plots).</p>	<p><b>Student Edition:</b> <i>Extra Practice</i> 758 #4-#6, 780 #4, 781 #8</p>

STANDARDS	PAGE REFERENCES
<b>ASSESSMENT ANCHOR</b>	
<b>M11.E.2</b> Select and/or use appropriate statistical methods to analyze data.	
<b>M11.E.2.1</b> Use measures of central tendency to describe a set of data. <i>Reference: 2.6.8.A, 2.6.11.A</i>	
<b>M11.E.2.1.1</b> Calculate or select the appropriate measure of central tendency (mean, mode or median) of a set of data given or represented on a table, line plot or stem-and-leaf plot.	<b>Student Edition:</b> 9 #36, 347, 772 #17 <i>Preparing for Standardized Tests</i> 347 #7
<b>M11.E.2.1.2</b> Calculate and/or interpret the range, quartiles and interquartile range of data.	<b>Student Edition:</b> <i>Math in the Workplace</i> 459
<b>M11.E.2.1.3</b> Describe how outliers affect measures of central tendency.	This objective can be met through classroom discussion and activities.
<b>ASSESSMENT ANCHOR</b>	
<b>M11.E.3</b> Understand and/or apply basic concepts of probability or outcomes.	
<b>M11.E.3.1</b> Apply probability and/or odds to practical situations. <i>Reference: 2.7.11.A, 2.7.11.E</i>	
<b>M11.E.3.1.1</b> Find probabilities for independent, dependent or compound events and represent as a fraction, decimal or percent).	<b>Student Edition:</b> 139 #10, 185 #7, #10, 347 #10, 545 #5, 629 #2
<b>M11.E.3.1.2</b> Find, convert and/or compare the probability and/or odds of a simple event.	<b>Student Edition:</b> 438 #29, 486 #24-#25, 487 #28 <i>Check for Understanding</i> 486 #7 <i>Real World Example</i> 484 <b>Teacher's Edition:</b> ICE 484; TT 484
<b>M11.E.3.2</b> Apply counting techniques in problem-solving settings. <i>Reference: 2.7.8.A</i>	
<b>M11.E.3.2.1</b> Determine the number of permutations and/or combinations or apply the fundamental counting principle (formula provided on the reference sheet).	<b>Student Edition:</b> 139 #1, #4, #8, #9, #10 <i>Preparing for Standardized Tests</i> 138-139

STANDARDS		PAGE REFERENCES
<b>ASSESSMENT ANCHOR</b>		
<b>M11.E.4</b>	<b>Develop and/or evaluate inferences and predictions or draw conclusions based on data or data displays.</b>	
<b>M11.E.4.1</b>	<b>Make predictions using data displays and probability.</b> <i>Reference: 2.7.8.E, 2.6.11.D</i>	
<b>M11.E.4.1.1</b> Estimate or calculate to make predictions based on a circle, line, bar graph or given situation.		<b>Student Edition:</b> 95, 179 #36, #38 <i>Math in the Workplace</i> 95
<b>M11.E.4.1.2</b> Use probability to predict outcomes.		<b>Student Edition:</b> 185, 347, 484, 486 <i>Checking for Understanding</i> 486 #7 <i>Preparing for Standardized Tests</i> 185 #9, 347 #2 <i>Real World Example</i> 484 <b>Teacher's Edition:</b> ICE 484
<b>M11.E.4.2</b>	<b>Analyze and/or interpret data on a scatter plot and/or use a scatter plot to make predictions.</b> <i>Reference: 2.6.11.C, 2.6.11.D</i>	
<b>M11.E.4.2.1</b> Draw, find and/or write an equation for a line of best fit for a scatter plot.		<b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 781 #8
<b>M11.E.4.2.2</b> Make predictions using the equations or graphs of best-fit lines of scatter plots.		<b>Student Edition:</b> <i>Preparing for Standardized Tests</i> 781 #7a